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| APPLICATION NO. | FILING DATE | FIRST NAMED INVENTOR | | ATTORNEY DOCKET NO. | CONFIRMATION NO. | |
|---|----------------------|-----------------------|---|-------------------------|------------------|--|
| 09/512,511 | 02/24/2000 | Jalil Fadavi-Ardekani | F | ADAVI-ARDEKANI25-14-2 | 5581 | |
| 7 | 590 02/05/2003 | | | | | |
| Mark D. Simp | Mark D. Simpson Esq. | | | EXAMINER | | |
| Synnestvedt & 2600 Aramark | Tower | | | PAN, DA | NIEL H | |
| 1101 Market Street Philadelphia, PA 19107-2950 | | | | ART UNIT | PAPER NUMBER | |
| i iniadelpina, i | 11 1710, 2750 | | | 2183 | | |
| | | | | DATE MAILED: 02/05/2003 | ì | |

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No. **09/512,511**

Applicant(s)

Fadavi-Ardekani et al.

Examiner

Pan

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| | The MAILING DATE of this communication appears | on the cover sheet with the correspondence address | | | |
|---|--|--|--|--|--|
| | or Reply | | | | |
| THE N | ORTENED STATUTORY PERIOD FOR REPLY IS SET MAILING DATE OF THIS COMMUNICATION. ions of time may be available under the provisions of 37 CFR 1.136 (a). In date of this communication. | TO EXPIRE MONTH(S) FROM no event, however, may a reply be timely filed after SIX (6) MONTHS from the | | | |
| - If NO p - Failure - Any rep | eriod for reply specified above is less than thirty (30) days, a reply within the eriod for reply is specified above, the maximum statutory period will apply a to reply within the set or extended period for reply will, by statute, cause the ply received by the Office later than three months after the mailing date of the patent term adjustment. See 37 CFR 1.704(b). | nd will expire SIX (6) MONTHS from the mailing date of this communication. e application to become ABANDONED (35 U.S.C. § 133). | | | |
| Status | | | | | |
| 1) 💢 | Responsive to communication(s) filed on Feb 24, 20 | 000 | | | |
| 2a) 🗌 | This action is FINAL . 2b) 💢 This act | on is non-final. | | | |
| 3) 🗆 | Since this application is in condition for allowance eclosed in accordance with the practice under Ex pair | except for formal matters, prosecution as to the merits is arternal Quayle, 1935 C.D. 11; 453 O.G. 213. | | | |
| Disposit | tion of Claims | | | | |
| 4) 💢 | Claim(s) <u>1-8</u> | is/are pending in the application. | | | |
| 4 | a) Of the above, claim(s) none | is/are withdrawn from consideration. | | | |
| 5) 🗆 | Claim(s) | is/are allowed. | | | |
| 6) 💢 | Claim(s) 1-3 and 6 | is/are rejected. | | | |
| 7) 💢 | Claim(s) 4, 5, 7, and 8 | is/are objected to. | | | |
| _ | | are subject to restriction and/or election requirement. | | | |
| Applica | tion Papers | | | | |
| 9) 🗆 | The specification is objected to by the Examiner. | | | | |
| 10) 🗌 | The drawing(s) filed on is/are | a) \square accepted or b) \square objected to by the Examiner. | | | |
| | Applicant may not request that any objection to the d | rawing(s) be held in abeyance. See 37 CFR 1.85(a). | | | |
| 11)□ | The proposed drawing correction filed on | is: a) \square approved b) \square disapproved by the Examiner. | | | |
| | If approved, corrected drawings are required in reply t | o this Office action. | | | |
| 12) | The oath or declaration is objected to by the Exami | ner. | | | |
| Priority | under 35 U.S.C. §§ 119 and 120 | | | | |
| 13)□ | Acknowledgement is made of a claim for foreign pr | iority under 35 U.S.C. § 119(a)-(d) or (f). | | | |
| a) | ☐ All b)☐ Some* c)☐ None of: | | | | |
| • | 1. \square Certified copies of the priority documents hav | e been received. | | | |
| ; | 2. \square Certified copies of the priority documents hav | e been received in Application No | | | |
| | application from the International Bure | | | | |
| | ee the attached detailed Office action for a list of the | · | | | |
| _ | , | | | | |
| _ | The translation of the foreign language provisiona Acknowledgement is made of a claim for domestic | | | | |
| Attachm | | priority and 00 0.0.0. 33 120 and/01 121. | | | |
| | tice of References Cited (PTO-892) | 4) Interview Summary (PTO-413) Paper No(s). | | | |
| 2) Notice of Draftsperson's Patent Drawing Review (PTO-948) | | 5) Notice of Informal Patent Application (PTO-152) | | | |
| 3) Information Disclosure Statement(s) (PTO-1449) Paper No(s) 6) Other: | | | | | |

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| 2 | Claims 1-8 are presented for examination. |
| 3 | |
| 4 | 1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the |
| 5 | basis for the rejections under this section made in this Office action: |
| 6 | A person shall be entitled to a patent unless - |
| 7 | |
| 8 9 10 11 12 13 | (a) the invention was known or used by others in this country, or patented or described in a printed publication in this or a foreign country, before the invention thereof by the applicant for a patent. (b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States. Claims 1,2 are rejected under 35 U.S.C. 102(a), (b) as being anticipated by Maki (4,839,851). |
| 14 | As to claim 1, Maki disclosed a digital signal processing system comprising at least: |
| 15 | a) a parameter RAM [14] coupled to a hardware accelerator [12], the parameter RAM [14] |
| 16 | adapted to store operating condition parameters (e.g. control words) for use by the hardware |
| 17 | accelerator (e.g see col.3, lines 4-28, see also col.1, lines 10-24, lines 55-64, col.2, lines 1-13 for |
| 18 | the background of the control of the hardware accelerator). |
| 19 | As to claim 2, Maki also included at least 1K X 16 bit RAM (e.g. see the 256 X 16 bits |
| 20 | of the RAM cell in col.3, lines 61-67). |
| 21 | The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all |
| 22 | obviousness rejections set forth in this Office action: |

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior

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art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

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Claims 3,6 are rejected under 35 U.S.C. 103(a) as being unpatentable over Maki (4,839,851) in view of Hoekstra (5,883,907).

As to claims 3,6, limitation of the parent claim 1 has been set forth in Earngraph# ..., therefore, it will not be repeated herein. Maki did not specifically show the plurality of ADSL

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lines as claimed. However, Hoekstra disclosed a plurality of ADSL lines [26] (e.g. see the ADSL transceivers [26] in fig.1, col. 2, lines 48-54). It would have been obvious to one of ordinary skill in the art to use Hoekstra in Maki for including the plurality of ADSL lines as claimed because the use of Hoekstra could enhance the control capability of Maki to accept different type of processing structures, such as asymmetric transmission of the data speed, at a given system condition, thereby expanding the processing structure of hardware accelerator in Maki, and it could be readily achieved by defining the communication parameters of ADSL, of Hoekstra into the configuration file of Maki, such that the configuration parameters (e.g. data length, transmission rate) could be recognizable by Maki, and because Maki also taught a parallel pipeline processing to optimize the transmission rate Tp (e.g. see col.1, lines 45-52), which was a suggestion of the need of using higher data rate device, and that his hardware accelerator was a general purpose hardware accelerator (e.g see col.2, lines 1-16), which should be applicable to any specific type of digital processing circuit, such as ADSL, and in doing so provided a motivation.

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| 1 | Claims 4,5,7,8 are objected as dependent upon a rejected base claim, but would |
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| 2 | be allowable as being reciting the specific RAM configurations of the ADSL lines, and if |
| 3 | rewritten in independent form including all of the limitations of the base claim and any |
| 4 | intervening claims. |
| 5 | The prior art made of record and not relied upon is considered pertinent to applicant's |
| 6 | disclosure |
| 7 | A)Ramseyer et al. (5,754,556) for specifically showing the teaching of hardware accelerator; |
| 8 | b)Chodnekar et al. (6,415,369) for specifically showing the teaching of ADSL. |
| 9 | Any inquiry concerning this communication or earlier communications from the examiner |
| 10 | should be directed to Dan Pan, Esq. whose telephone number is 703 305 9696. The examiner |
| 11 | can normally be reached on M-F from 8:00 AM to 5:00 PM. |
| 12 | If attempts to reach the examiner by telephone are unsuccessful, the examiner's |
| 13 | supervisor, Dr. Chan, can be reached on (703) 305 9712. The fax phone number for the |
| 14 | organization where this application or proceeding is assigned is |
| 15 | a) before final 703 746 7239 |
| 16 | b) after final 703 846 7238 |
| 17 | c) customer service 703 746 7240. |
| 18 | Any inquiry of a general nature or relating to the status of this application or proceeding |
| 19 | should be directed to the receptionist whose telephone number is 703 205 3900. |

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PAMEL HEAN PRIMARY EXAMINER GROUP

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